Honeywell

VX6

Vehicle-Mount Computer

Microsoft® Windows® CE 5 Operating System

Vehicle Mounting Reference Guide

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Lithium Battery Safety Statement

Caution: Lithium battery inside. Danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by battery manufacturer. (US)

Attention: Contient une pile de lithium. Risque d'explosion dans le cas où la pile ne serait pas correctement remplacée. Remplacer uniquement avec une pile semblable ou equivalente au type de pile recommandé par le fabricant. (FR)

Forsigtig: Indeholder lithiumbattterier. Risiko for eksplosion, hvis batteriet udskiftes forkert. Må kun udskiftes med samme eller tilsvarende type, som anbefalet af fabikanten. (DK)

Varoitus: Tämä tuote käyttää laservaloa. Skannerissa on jokin seuraavista tarroista. Lue Huomio-kohta. (FI)

Vorsicht: Enthält Lithium-Batterie. Bei unsachgemäßem Ersatz besteht Explosionsgefahr. Nur durch gleichen oder vom Hersteller empfohlenen Typ ersetzen. (DE)

Attenzione: Batteria al litio. Pericolo di esplosione qualora la batteria venga sostituita in maniera scorretta. Sostituire solo con lo stesso tipo o equivalente consigliato per il fabbricante. (IT)

Atenção: Contém pilha de lítio. Há perigo de explosão no caso de uma substituição incorreta. Substitua somente pelo mesmo tipo, ou equivalente, recomendado pelo fabricante. (PT)

Varning: Innehåller litiumbatteri. Fara för explosion om batteriet är felaktigt placerat eller av fel typ. Använd endast samma eller motsvarande typ batterier rekommenderade av tillverkaren. (SE)

Advarsel: Innmontert Lithium batteri. Eksplosjonsfare ved feil montering av batteri. Benytt kun batteri anbefalt av produsent. (NO)

Cuidado: Pila de litio adentro. Peligro de explosión si la pila se reemplaza incorrectamente. Reemplace solamente con el mismo tipo o equivalente recomendado por el fabricante. (ES)

Oppassen: Bevat Lithium-batterij. Incorrrecte plaatsing van batterij kan leiden tot explosiegevaar. Alleen vervangen door hetzelfde of door fabrikant aanbevolen gelijkwaardig type. (NL)

Προσοχή: Υπάρχει μπαταρία από λίθιο εσωτερικά. Υπάρχει κίνδυνος έκρηξης εάν η μπαταρία αντικατασταθεί με λανθασμένο τρόπο. Αντικαταστήστε μόνο με τον ίδιο ή ισοδύναμο τύπο που συνιστάται από τον κατασκευαστή. (GR)	**주의:** 리튬 배터리 내부. 배터리가 잘못 설치되었을 경우 폭발의 위험이 있습니다. 동일한 배터리, 또는 배터리 제조업체가 권장하는 배터리로 교체하십시오. (KR)
注意: リチウム電池が入っています。間違った種類の電池を使用すると、破裂する恐れがあります。同じ電池、または電池製造元が推奨する同等の電池を使用してください。 (JP)	**小心:** 内装锂电池。如电池更换不当，则有发生爆炸的危险。只能用电池制造商推荐的相同或同等电池进行更换。 (CN)
Dikkat: İçinde lityum bataryası bulunur. Bataryanın yanlış değiştirilmesi patlama tehlikesi yaratır. Aynısıyla veya üreticinin önerdiği eşdeğer tiple değiştirin. (TR)	

Legend: Chinese – CN; Danish – DK; Dutch – NL; English – US; Finnish – FI; French – FR; German – DE; Greek – GR; Italian – IT; Japanese – JP; Korean – KR; Norwegian – NO; Portuguese – PT; Spanish – ES; Swedish – SE; Turkish – TR.

Vehicle Power Supply Connection Safety Statement

Vehicle Power Supply Connection: If the supply connection is made directly to the battery, a ten A slow-blow fuse should be installed in the positive lead within 5 inches (12.7 cm.) of the battery positive (+) terminal. (US)

Raccordement de l'alimentation du véhicule Si l'alimentation est raccordée directement à la batterie, un fusible à action retardée de 10 A doit être installé sur le câble positif à moins de 12,7 cm de la borne positive (+) de la batterie. (FR)

EL forsyning af køretøjet. Er forsyningsforbindelsen direkte tilknyttet til batteriet og og tilsluttet til den positive part indenfor 12,7 cm (+ delen). vil der være en langsom tændelse af 10 ampere. (DK)

Kytkentä ajoneuvon virtalähteeseen Jos virtaa otetaan suoraan akusta, 10 ampeerin hidas sulake on asennettava positiiviseen johtoon enintään 12 cm:n etäisyydelle akun positiivisesta (+) navasta. (FI)

Anschluss an Fahrzeugbatterie Bei direktem Anschluss an die Fahrzeugbatterie sollte eine träge 10A-Sicherung in die positive Leitung zwischengeschaltet werden, und zwar nicht weiter als ca. 13 cm von der positiven (+) Batterieklemme entfernt. (DE)

Σύνδεση Τροφοδοτικού Ισχύος Οχήματος Αν η σύνδεση του τροφοδοτικού γίνει κατευθείαν στη μπαταρία, μια ασφάλεια βραδείας τήξης των 10A θα πρέπει να τοποθετηθεί στο θετικό καλώδιο εντός 5 ιντσών (12,7 εκ.) του θετικού (+) ακροδέκτη της μπαταρίας. (GR)

Collegamento dell'alimentazione del veicolo Se il collegamento dell'alimentazione viene stabilito direttamente con la batteria, è necessario installare un fusibile ad azione lenta da 10 A nel conduttore positivo a meno di 5 in. (12,7 cm) dal terminale positivo (+) della batteria. (IT)

Tilkople strømforsyningen til kjøretøyet Hvis strømforsyningen koples direkte til batteriet, skal det installeres en 10 A treg sikring i den positive ledningen innen 12,7 cm fra plusspolen (+) på batteriet. (NO)

Ligação do fornecimento de corrente do veículo Se a ligação de fornecimento de corrente for ligada directamente à bateria, deve instalar-se um fusível de 10A no terminal positivo, a 12,7 cm. do terminal positivo (+) da bateria. (PT)

Conexión de suministro eléctrico para el vehículo Si el suministro eléctrico se proporciona directamente a la batería, se debe instalar un fusible de retardo de 10 A en el conductor positivo, como máximo a 12,7 cm (5 pulgadas) del terminal positivo (+). (ES)

Fordonets strömförsörjningskoppling Om strömkopplingen görs direkt till batteriet, måste en 10A-säkring installeras i den positivt laddade ledningen inom 12.7 cm från batteriets pluspol (+). (SE)

Taşıt Güç Kaynağı Bağlantısı Kaynak bağlantısı doğrudan aküye yapılırsa, pozitif bağlantı kablosu üzerinde akünün pozitif (+) kutbuna 12.7 cm mesafede 10A'lık yavaş atan bir sigorta monte edilmelidir. (TR)

Legend: Danish – DK; English – US; Finnish – FI; French- - FR; German – DE; Greek – GR; Italian – IT; Norwegian – NO; Portuguese – PT; Spanish – ES; Swedish – SE; Turkish – TR.

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Chapter 1: Introduction

The VX6 is a rugged vehicle-mounted computer with a Microsoft® Windows® CE 5 operating system. The VX6 and its Quick Mount Smart Dock are designed to be mounted in a vehicle with either a RAM mount or U bracket system. A power cable is provided with each VX6. Optional communication cables are available.

About This Guide

This VX6 Vehicle Mounting Reference Guide provides instruction for the installer to follow when mounting a VX6 in a vehicle.

Preparing the Powered Vehicle Mounted Cradle for Use

The powered vehicle mounted assembly should be secured to an area in the vehicle where it:

- Does not obstruct the driver's vision or safe vehicle operation .
- Will be protected from rain or inclement weather.
- Will be protected from extremely high concentrations of dust or wind-blown debris.
- Can be easily accessed by a user seated in the driver's seat while the vehicle is not in operation.

Quick Start

The following list outlines, in a general way, the process to follow when preparing the VX6 powered vehicle mounted cradle for use. Refer to the following sections in this document for more details.

1. Attach the RAM base vehicle mounting assembly to the vehicle.
2. Attach the RAM arm assembly to the vehicle mounting assembly.
3. Attach the VX6 assembly to the RAM arm.
4. Adjust the VX6 to the best viewing angle.
5. Connect antenna. Note: The vehicle remote mount antenna cannot be used by devices with an internal antenna.
6. Connect peripheral cables.
7. Secure the DC/DC or 12 VDC power connector from the vehicle mounted power supply to the Power port.
8. Secure all cables in strain relief cable clamps.

The VX6 in the powered vehicle mounted assembly is ready for use.

Maintenance - Vehicle Mounted Devices

Check the vehicle mounting hardware frequently and re-tighten if necessary.

If the vehicle mounting hardware and connections become broken, loose or cracked, the assembly must be taken out of service and replaced. Contact Technical Assistance for help.

Cleaning

Do not use paper towels or harsh-chemical-based cleaning fluids since they may result in damage to the VX6 surfaces, cables, connectors and mounting hardware.

Use a clean soft cloth to wipe any dirt, moisture or grease from the VX6, connectors, cables or the vehicle mounting hardware. Do not use any liquid to clean the VX6, or connectors. Spray or dampen the cleaning cloth with the cleaning liquid. If possible, clean only those areas which are soiled. Lint/particulates can be removed with clean, filtered canned air.

Chapter 2: Install U Mounting Brackets

Caution:	This device is intended to transmit RF energy. For protection against RF exposure to humans and in accordance with FCC rules and Industry Canada rules, this transmitter should be installed such that a minimum separation distance of at least 20 cm (7.8 in.) is maintained between the antenna and the general population. This device is not to be co-located with other transmitters.

Equipment Needed: Phillips No. 1 screwdriver and a Torque wrench capable of measuring to 50 inch pounds (5.64±.56 N/m).

Note: Torquing tool is not supplied by Honeywell. Bolts, washers, and wrench needed when attaching the bottom mounting bracket to the vehicle are not supplied by Honeywell.

The U-Bracket system consists of

- U-Bracket for mounting VX6
- UPS Battery mount options:
  - Integrated UPS battery mount
  - Remote mount for UPS battery
- Available without U-Bracket for vehicles previously equipped with an Honeywell vehicle mounted computer

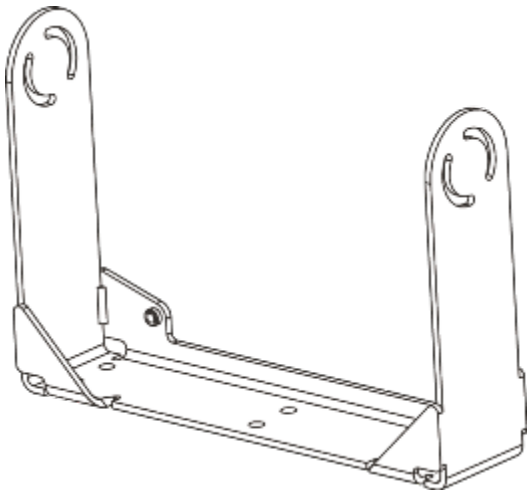
Before installation begins, verify you have the applicable vehicle mounting bracket assembly components necessary for your mount type.

U-Bracket Mount System

Note: Torquing tool is not supplied by Honeywell. Bolts, washers, and wrench needed when attaching the bottom mounting bracket to the vehicle are not supplied by Honeywell.

Components

Bottom Mounting Bracket



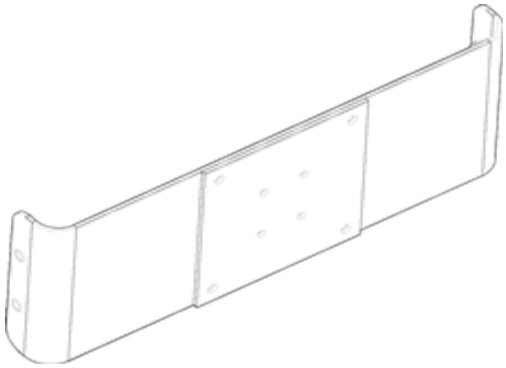
This bracket is mounted to the vehicle. The VX6 can be mounted to the bottom mounting bracket. Additionally, the UPS battery pack may be mounted to the bottom mounting bracket.

If the optional UPS battery pack is to be mounted to the bottom bracket, use the following parts included with the UPS battery pack:

- 1” long aluminum spacer w/through hole (2 each)
- 1/4 flat washer (2 each)
- 1/4 locking washer (2 each)
- screw, pan head, 1/4-20x2 (2 each)

Back Bracket Assembly

Note: Rear Bracket may have a different appearance than shown however hardware and mounting instructions are the same.



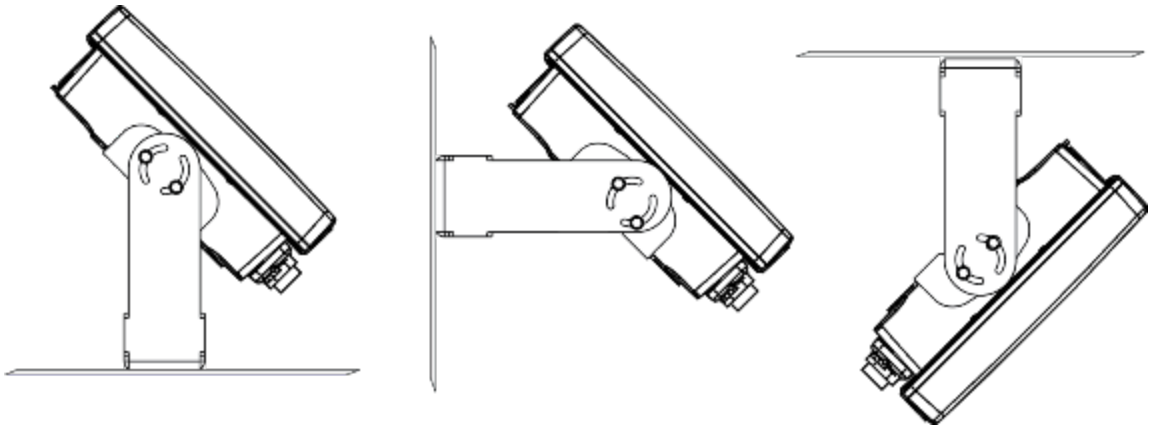
Back Bracket

Hardware:

- 1/4 flat washer (8 each)
- 1/4 locking washer (8 each)
- 1/4 flat washer (8 each)

Procedure

Mounting Positions



The VX6 viewing angle can be adjusted through a wide range to provide the best viewing angle.

Torque Measurement

You will need a torquing tool capable of torquing to 50 inch pounds (5.64±.56 N/m).

Torque all screws and bolts according to the following table:

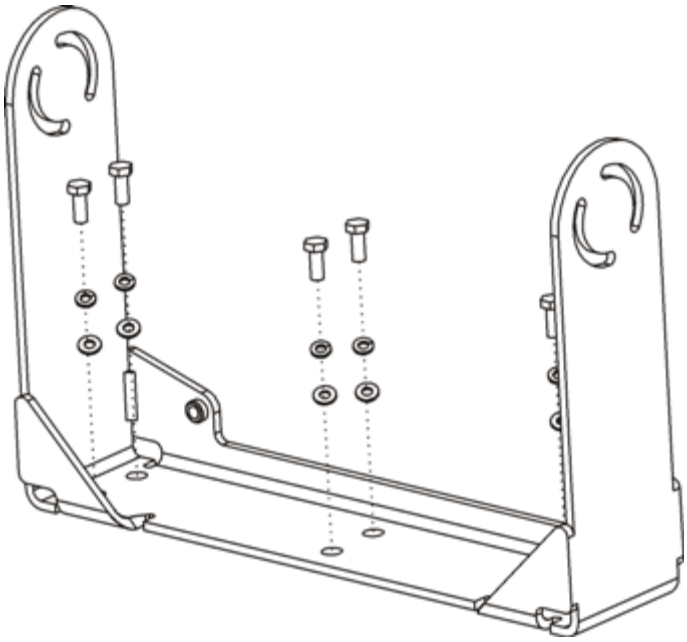
For these screws and bolts…	**Torque to**
1/4 bolts	50.0±5 in/lb (5.64±.56 N/m)

Step 1 - Mount Bottom Mounting Bracket to Vehicle

1. Position the bracket to allow access to the switches and ports on the bottom of the VX6.
2. Attach the bottom mounting bracket to the vehicle mounting surface using a minimum of four 1/4 bolts (or equivalent) fasteners.

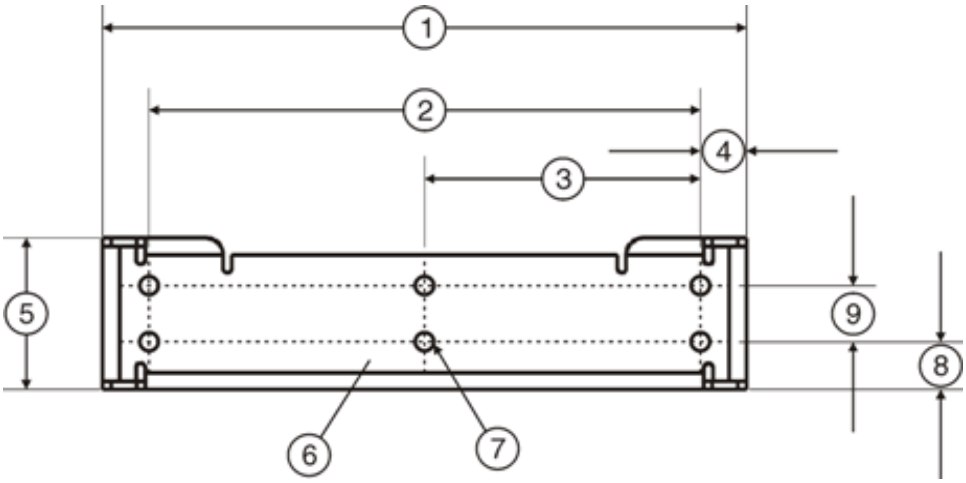
Note: 1/4 bolts and washers not included. It is recommended to use lock washers and flat washers on the fasteners.

IMPORTANT: Mount to the most rigid surface available.



After the bottom bracket has been attached to a rigid surface, you are ready to assemble the VX6 bracket configuration.

Mounting Dimensions



1. 14.40 in / 359.2 mm
2. 12.10 in / 307.3 mm
3. 6.05 in / 153.6 mm
4. 1.02 in / 25.9 mm
5. 3.38 in / 85.85 mm
6. Vehicle Mount Footprint
7. 0.406 in / 10.312 mm
8. 0.88 in / 22.3 mm
9. 1.25 in / 31.75 mm

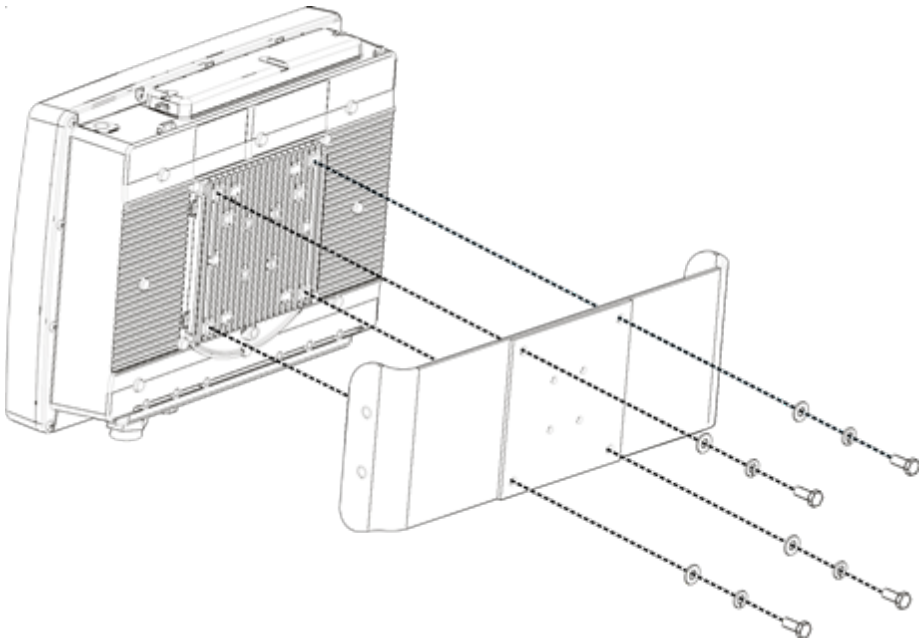
U-Bracket Footprint (Not to Scale)

Step 2 - Attach Back Bracket to VX6

Turn the VX6 off before attaching the rear bracket.

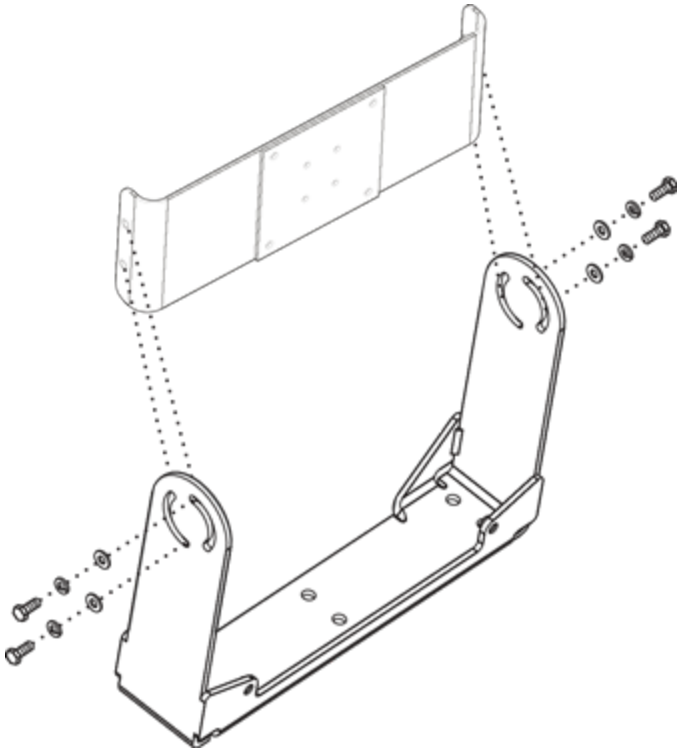
2. Place the VX6 face down on a stable surface.

3. Align the rear bracket with the holes on the back of the VX6. Attach with four 1/4- 20x5/8 bolts, using one flat washer and one locking washer per bolt. Place the locking washer on the bolt before the flat washer.



Step 3 - Attach Assembly to Bottom Mount Bracket

1. Place lock washer first, then flat washer on 1/4-20x5/8 bolt. Next insert mounting bolts through the curved apertures in the bottom mounting bracket and into the screw holes on the side of the back mounting bracket.



2. Loosely tighten each bolt as it is inserted.

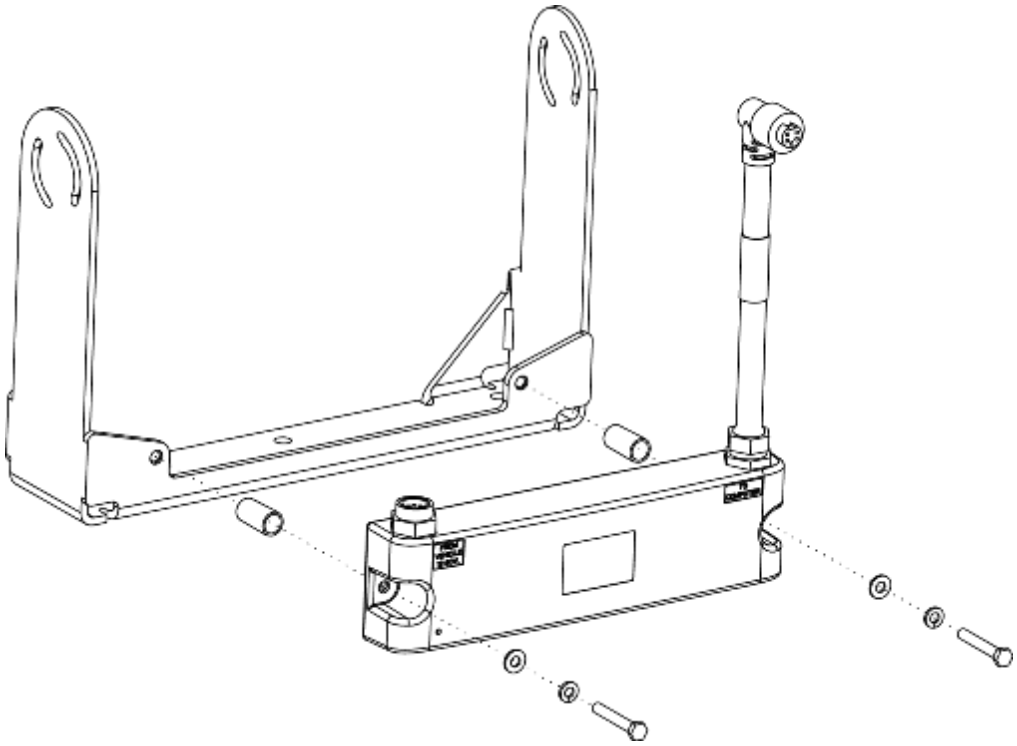
Important: Do not torque bolts until all bolts are in place and viewing angle is adjusted.

3. Loosen the hex bolts on both sides to adjust the viewing angle of the mounted VX6.
4. Torque the hex bolts to 50±5 in lb (5.64±.56 N m).

Note: Test the torque on the bolts frequently during operation and re-tighten if necessary to 50±5 in lb (5.64±.56 N m).

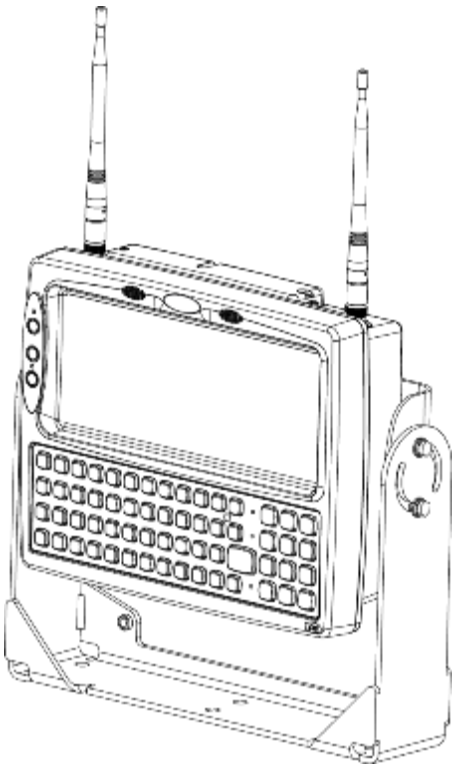
Step 4 - Attach UPS Battery Pack

1. If using a UPS battery pack, the battery pack can be mounted to the bottom mounting bracket. Place a locking washer and then a flat washer on a 1/4-20x2 bolt. Thread the bolt through the UPS Battery Pack, then through the 1” aluminum spacer and into the mounting bracket.



2. Connect all cables to the VX7. Secure the cables with the strain relief cable clamps, ensuring a slack loop remains between the cable clamp and the accessory connector.
3. The vehicle mounted bracket and the VX7 are now ready to use.

Completed Assembly



Chapter 3: Install RAM Mounting Brackets

Caution:	This device is intended to transmit RF energy. For protection against RF exposure to humans and in accordance with FCC rules and Industry Canada rules, this transmitter should be installed such that a minimum separation distance of at least 20 cm (7.8 in.) is maintained between the antenna and the general population. This device is not to be co-located with other transmitters.

Equipment Needed: Phillips No. 1 screwdriver and a Torque wrench capable of measuring to 50 inch pounds (5.64±.56 N/m).

Note: Torquing tool is not supplied by Honeywell. Bolts, washers, and wrench needed when attaching the bottom mounting bracket to the vehicle are not supplied by Honeywell.

Several types of RAM mounting options are provided for the VX6:

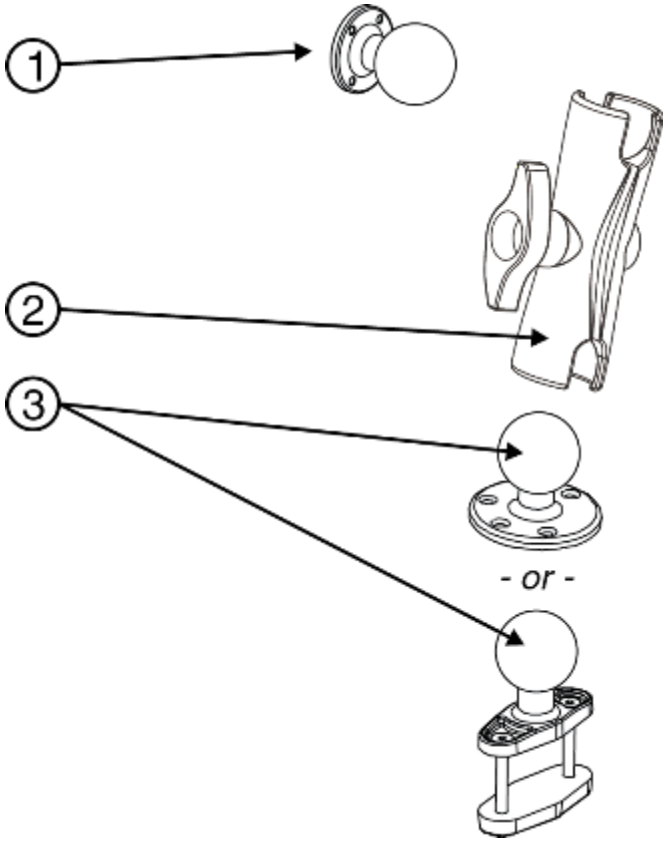
- RAM Ball or Ram Ball Mount Bracket for back of the VX6
- Available RAM ball base or RAM clamp mount
- Remote mount for UPS battery pack

Before installation begins, verify you have the applicable vehicle mounting bracket assembly components necessary for your mount type.

RAM Ball Mount System

Components

The RAM mounting assembly consists of the following parts:



1. Keyboard mounting plate.
2. RAM arm, size C
3. Keyboard mounting bracket

- Hardware (not shown):
  - Screws, 8-32x5/8 (4 each) for use with the 95 key keyboard
  - Screws, 10-32x5/8 (4 each) for use with the 60 key keyboard
  - Bolts, 1/4-20x5/8 (3 each)
  - Washers, 1/4 locking (3 each)
  - Washers, 1/4 flat (3 each)

1. VX6 RAM ball bracket
2. RAM arm, size D
3. RAM ball base- or - RAM clamp mount

- RAM Clamp Mount includes:
  - Upper Clamp Piece with Ball
  - Lower Clamp Piece
  - Bolts (2 each)
  - Nylon locking nuts (2 each)
- Hardware (not shown):
  - Bolts, 1/4-20x5/8 (4 each)
  - Washers, 1/4 locking (4 each)
  - Washers, 1/4 flat (4 each)
  - RAM wrench

Procedure

Torque Measurement

You will need a torquing tool capable of torquing to 50 inch pounds (5.64±.56 N/m).

Torque all screws and bolts according to the following table:

For these screws and bolts…	Torque to
1/4 bolts	50.0±5 in/lb (5.64±.56 N/m)

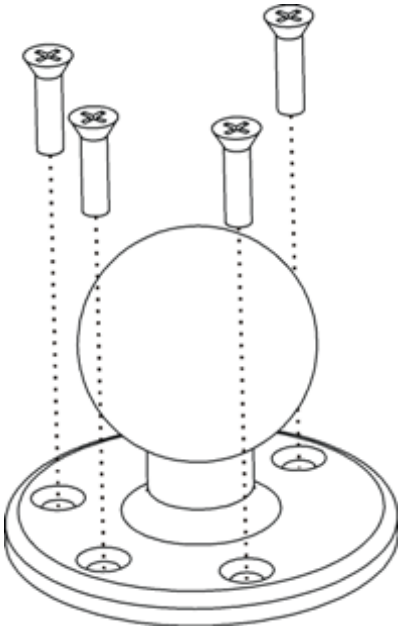
Step 1a – Mount Vehicle RAM Mount Bracket

Note: If you are using the RAM clamp mount, please skip to Step 1b.

1. Determine the position for mounting the RAM ball base. Be sure to position the RAM bracket to allow access to the switches and ports on the bottom of the VX6.
2. Attach the RAM ball base to the vehicle mounting surface using four 1/4 bolts (or equivalent) fasteners.

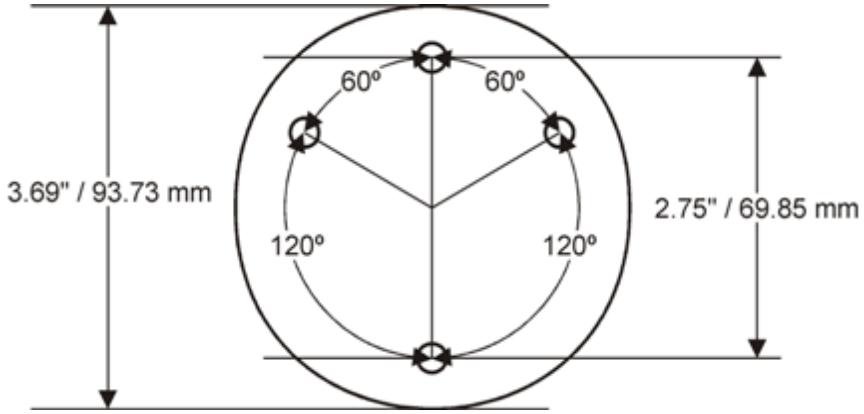
Note: 1/4 bolts not included.

IMPORTANT: Mount to the most rigid surface available.



Mounting Dimensions

Note: Drill and tap holes for 1/4 bolts.

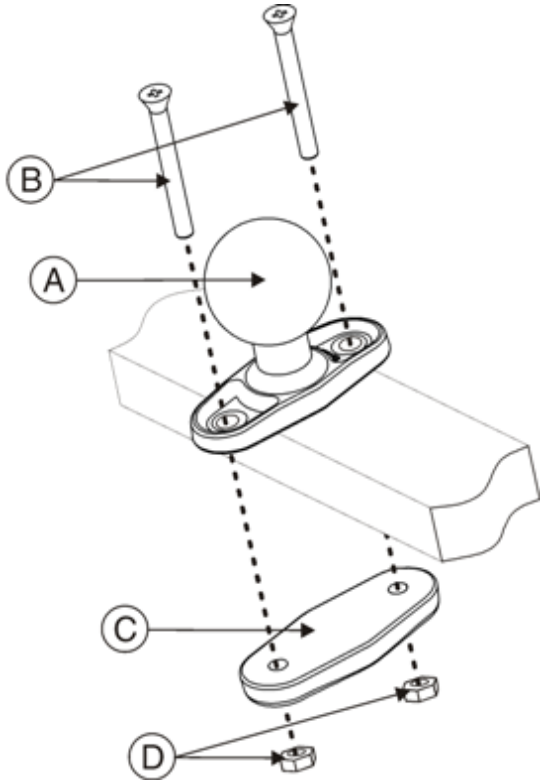


(Not To Scale)

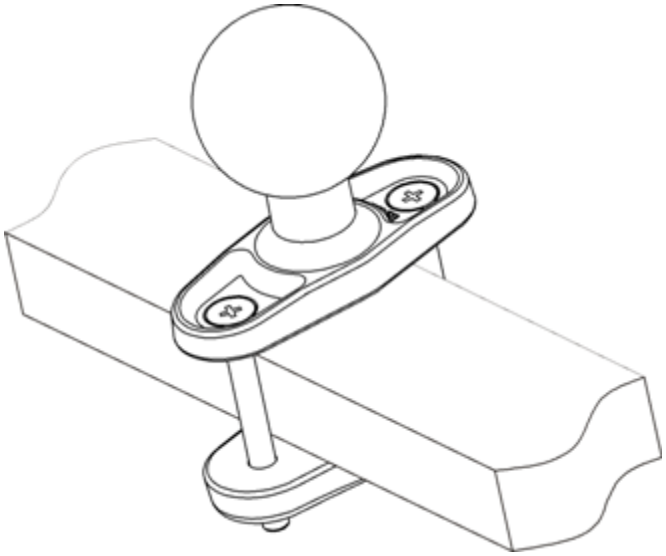
Step 1b – Mount Vehicle RAM Clamp Mount

Note: If you are using the RAM ball base, complete Step 1a and skip Step 1b.

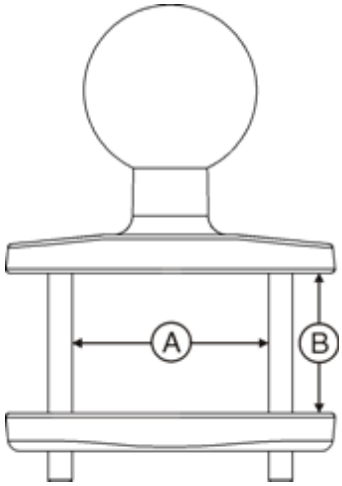
1. Determine the position for mounting the RAM clamp mount. The clamp mount can be used on a beam (such as on a fork lift truck) up to 2.5" (63.5 mm) wide and approximately 2" (50.8 mm) thick. The clamp may be attached to a thicker beam by substituting longer bolts (not included). Be sure to position the RAM clamp mount to allow access to the switches and ports on the bottom of the VX6.



2. Position the upper clamp piece with ball (A) on the beam. Place the bolts (B) through the holes in the upper clamp piece.
3. Position the lower clamp piece (C) below the beam. Align the bolts with the holes in the lower clamp piece.
4. Place the nylon locking nuts (D) on the bolts and tighten the bolts.



Mounting Dimensions



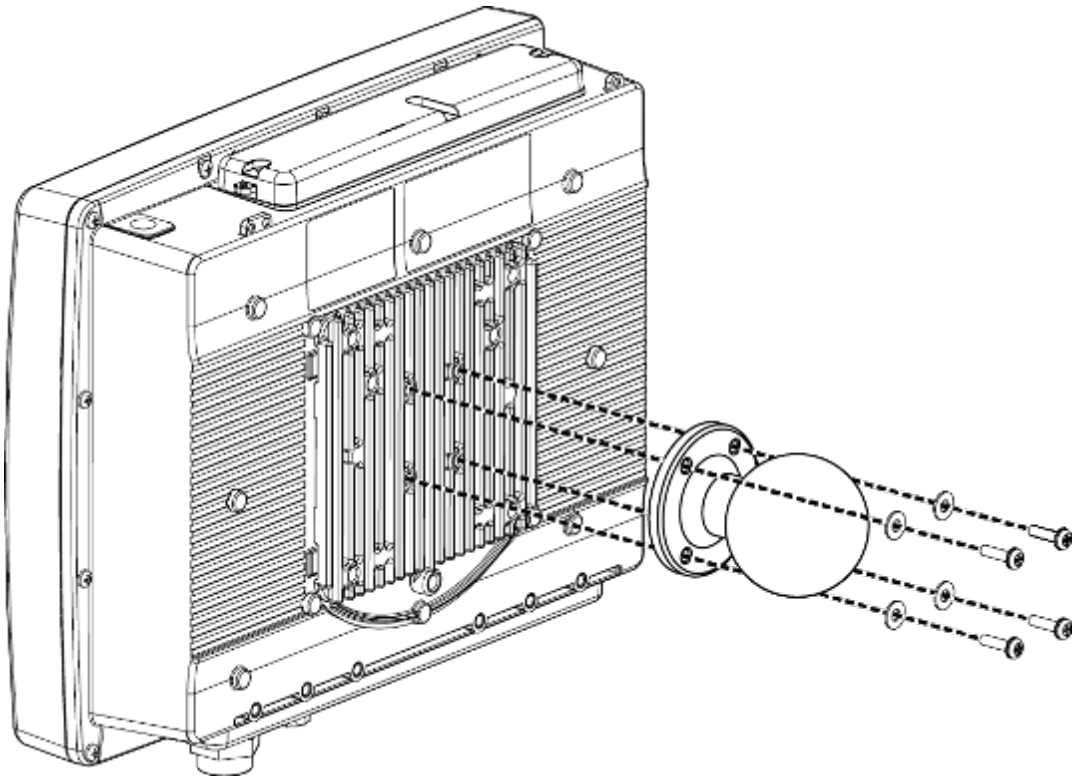
A. 2.56” (65.02 mm)

B. 1.84” (46.74 mm) Varies depending on bolt length

(Not To Scale)

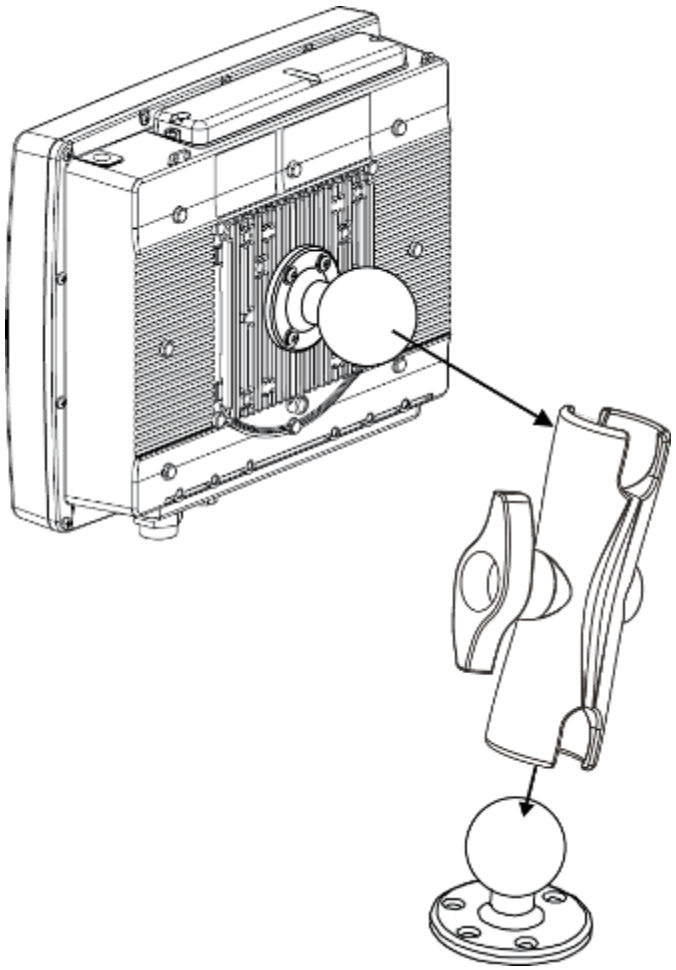
Step 2 – Attach RAM Ball to the VX6

1. Turn the VX6 off before attaching the RAM mount ball.
2. Place the VX6 face down on a stable surface.
3. Position the RAM ball bracket on the rear of the VX6, aligning the curved edge on the RAM mount bracket with the curved edge on the VX6.
4. Attach with four 1/4-20x5/8 bolts, using one flat washer and one locking washer per bolt. Place the locking washer on the bolt before the flat washer.



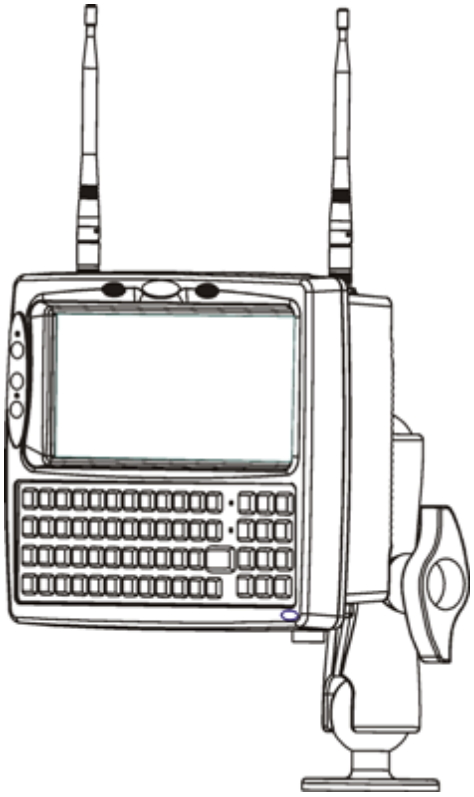
Step 3 – Attach VX6 Assembly to RAM Mount

1. Slip the RAM arm over the ball on the vehicle RAM ball bracket.
2. Insert the ball of the RAM mount bracket into the RAM arm.
3. Adjust the VX6 to the desired position and tighten the knob on the RAM arm using the supplied RAM wrench.



Note: RAM ball base shown.

Completed Assembly

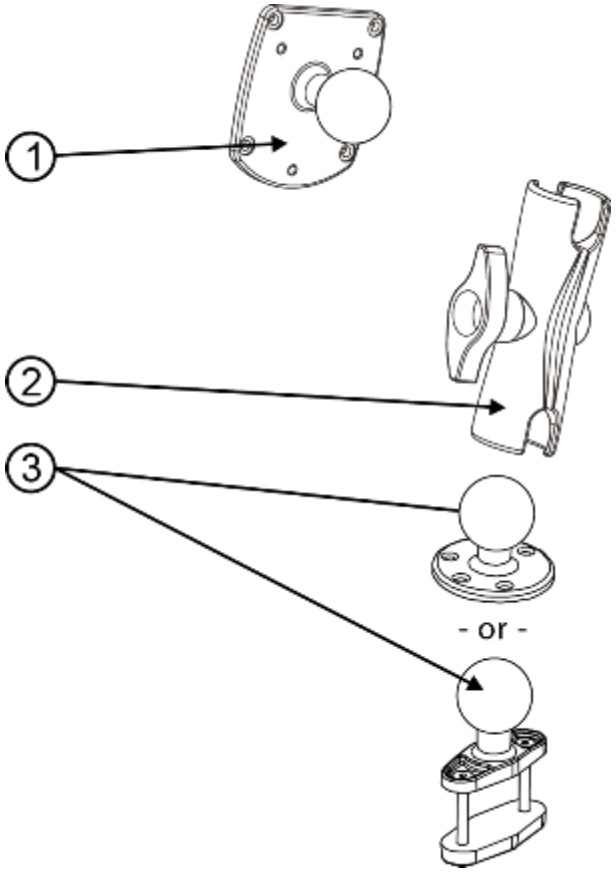


Note: RAM ball base shown.

RAM Bracket Mount System

Components

The RAM mounting assembly consists of the following parts:



1. VX6 RAM ball bracket
2. RAM arm, size D
3. RAM ball base - or - RAM clamp mount
   - RAM Clamp Mount includes:
     - Upper Clamp Piece with Ball
     - Lower Clamp Piece
     - Bolts (2 each)
     - Nylon locking nuts (2 each)
   - Hardware (not shown):
     - Bolts, 1/4-20x5/8 (4 each)
     - Washers, 1/4 locking (4 each)
     - Washers, 1/4 flat (4 each)
     - RAM wrench

Procedure

Torque Measurement

You will need a torquing tool capable of torquing to 50 inch pounds (5.64±.56 N/m).

Torque all screws and bolts according to the following table:

For these screws and bolts…	Torque to
1/4 bolts	50.0±5 in/lb (5.64±.56 N/m)

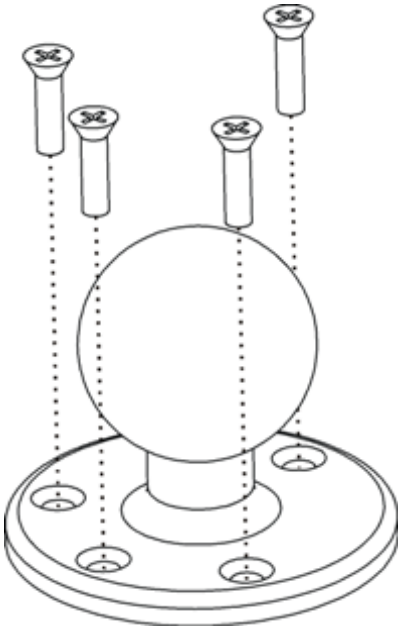
Step 1a – Mount Vehicle RAM Mount Bracket

Note: If you are using the RAM clamp mount, please skip to Step 1b.

1. Determine the position for mounting the RAM ball base. Be sure to position the RAM bracket to allow access to the switches and ports on the bottom of the VX6.
2. Attach the RAM ball base to the vehicle mounting surface using four 1/4 bolts (or equivalent) fasteners.

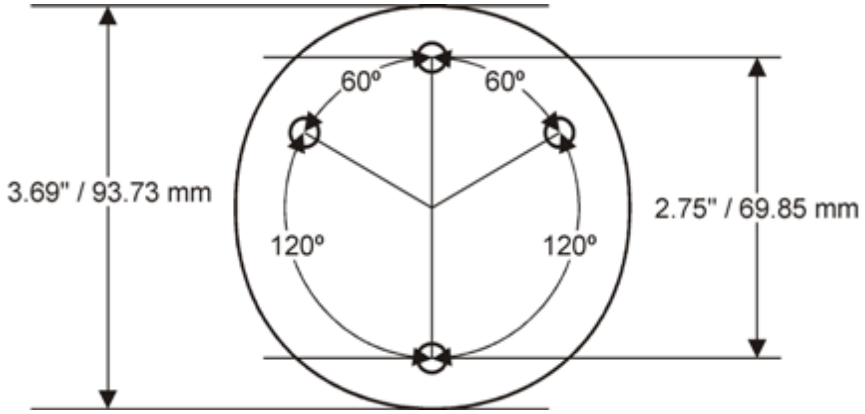
Note: 1/4 bolts not included.

IMPORTANT: Mount to the most rigid surface available.



Mounting Dimensions

Note: Drill and tap holes for 1/4 bolts.

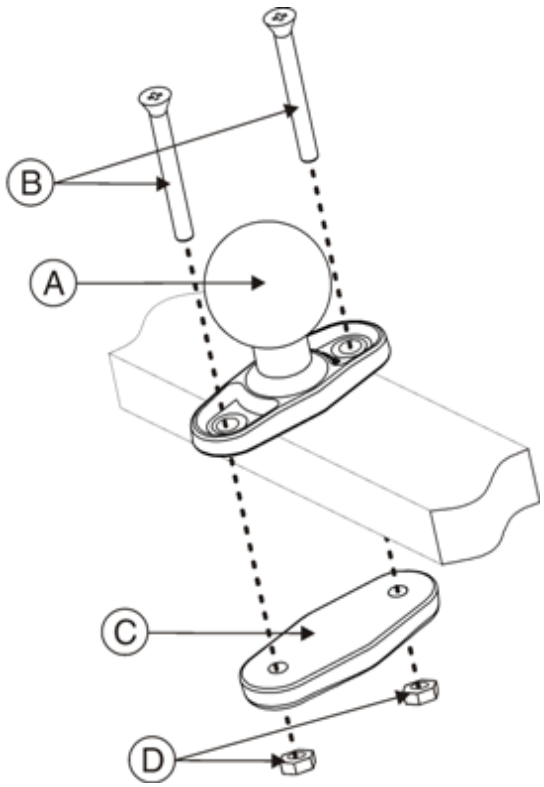


(Not To Scale)

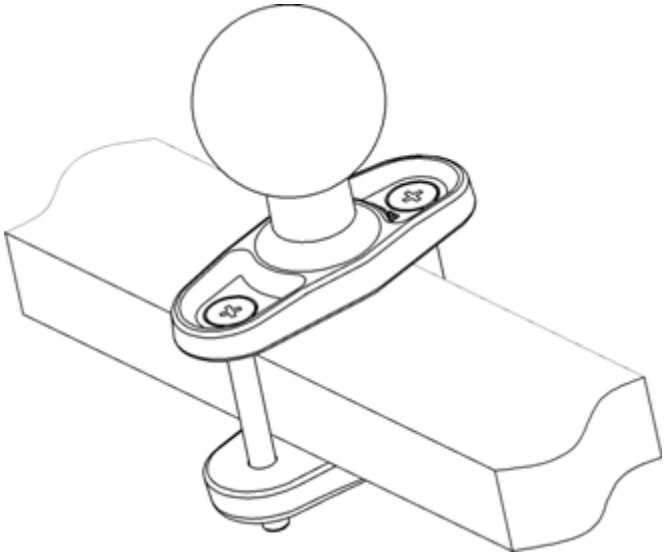
Step 1b – Mount Vehicle RAM Clamp Mount

Note: If you are using the RAM ball base, complete Step 1a and skip Step 1b.

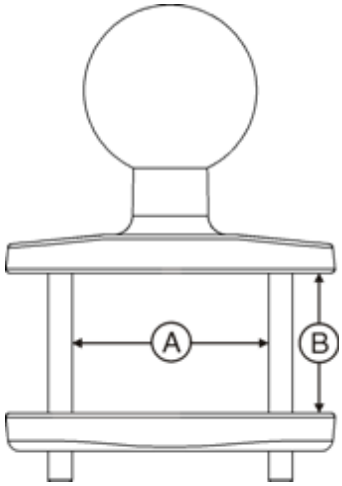
1. Determine the position for mounting the RAM clamp mount. The clamp mount can be used on a beam (such as on a fork lift truck) up to 2.5" (63.5 mm) wide and approximately 2" (50.8 mm) thick. The clamp may be attached to a thicker beam by substituting longer bolts (not included). Be sure to position the RAM clamp mount to allow access to the switches and ports on the bottom of the VX6.



2. Position the upper clamp piece with ball (A) on the beam. Place the bolts (B) through the holes in the upper clamp piece.
3. Position the lower clamp piece (C) below the beam. Align the bolts with the holes in the lower clamp piece.
4. Place the nylon locking nuts (D) on the bolts and tighten the bolts.



Mounting Dimensions

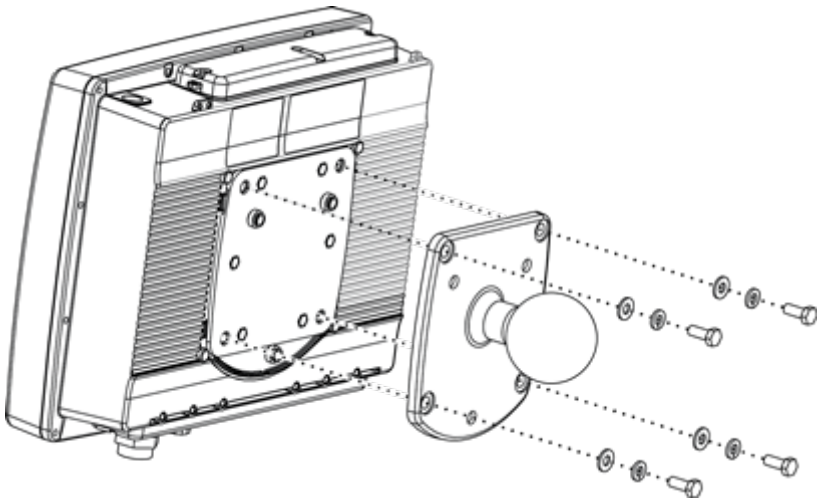


A. 2.56” (65.02 mm)
B. 1.84” (46.74 mm) Varies depending on bolt length

(Not To Scale)

Step 2 – Attach RAM Mount Ball to the VX6

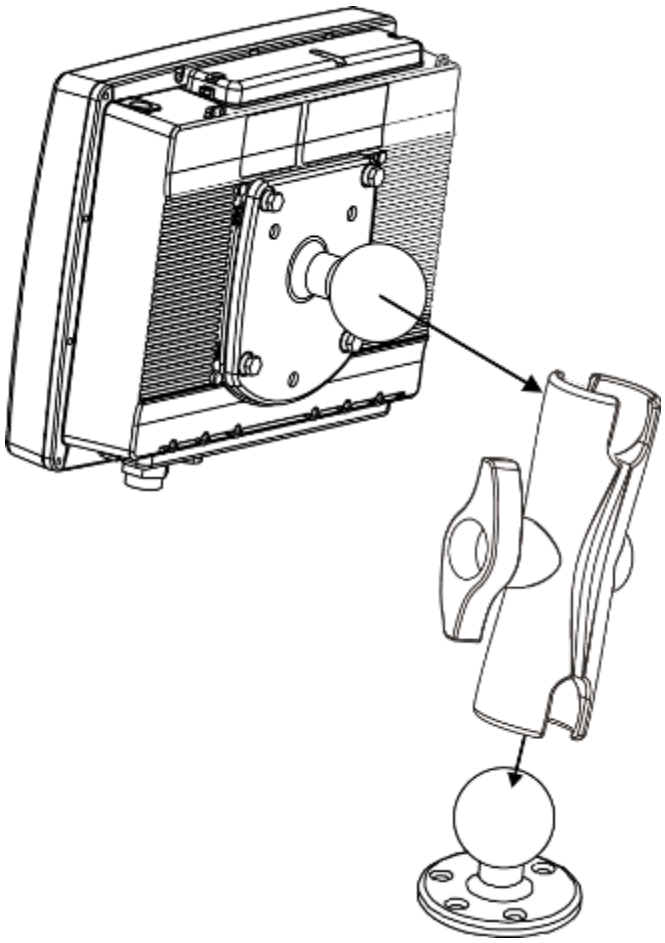
1. Turn the VX6 off before attaching the RAM mount ball.
2. Place the VX6 face down on a stable surface.
3. Position the RAM ball bracket on the rear of the VX6, aligning the curved edge on the RAM mount bracket with the curved edge on the VX6.
4. Attach with four 1/4-20x5/8 bolts, using one flat washer and one locking washer per bolt. Place the locking washer on the bolt before the flat washer.



Caution	
	Failure to use one ¼ flat washer and one ¼ locking washer per bolt can result in damage to the backplate of the VX6.

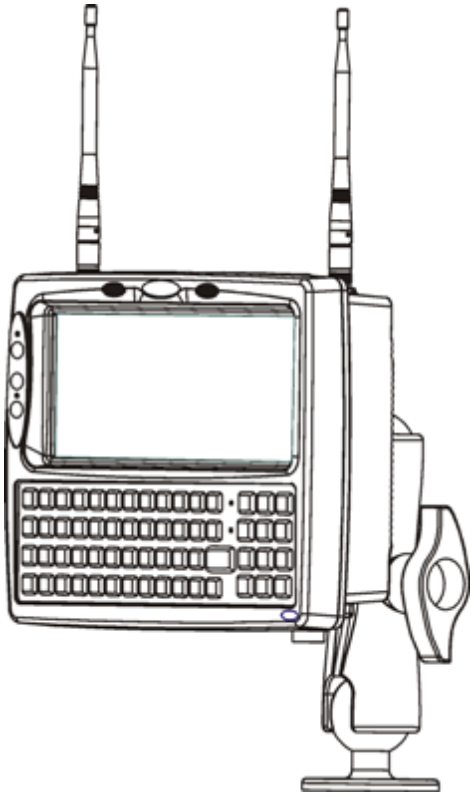
Step 3 – Attach VX6 Assembly to RAM Mount

1. Slip the RAM arm over the ball on the vehicle RAM ball bracket.
2. Insert the ball of the RAM mount bracket into the RAM arm.
3. Adjust the VX6 to the desired position and tighten the knob on the RAM arm using the supplied RAM wrench.



Note: RAM ball base shown.

Completed Assembly



Note: RAM ball base shown.

Chapter 4: Connect Cables

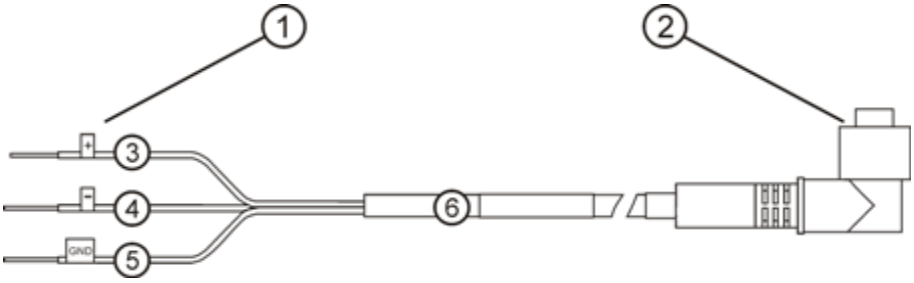
There are many cables available for the VX6. This section deals with those cables that are a part of the installation process, such as:

Various data and communication cables are available for the VX6.

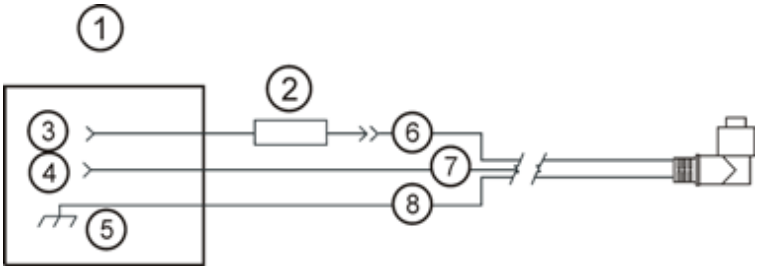
Vehicle 12-80 VDC Power Connection

Caution:	For proper and safe installation, the input power cable must be connected to a fused circuit on the vehicle. This fused circuit requires a ten Amp maximum time delay (slow blow) high interrupting rating fuse. If the supply connection is made directly to the battery, the fuse should be installed in the positive lead within 5 inches of the battery positive (+) terminal. Note: For North America, a UL Listed fuse is to be used.
Caution:	For installation by trained service personnel only.

Note: Please see Power Adapter Cable for information on adapting a VX1, VX2 or VX4 DC power supply to the VX6.



1. To Vehicle Battery
2. To Vehicle Mounted Device or UPS Battery Pack
3. White (DC+)
4. Black (DC-)
5. Green (GND)
6. 12 – 80 VDC



1. Vehicle Electrical System
2. 10 Amp Slow Blow Fuse
3. DC +
4. DC -
5. Vehicle Chassis
6. White
7. Black
8. Green

Note: Correct electrical polarity is required for safe and proper installation. Connecting the cable to the VX6 with the polarity reversed will cause the VX6 fuse to be blown. See the following figure titled "Vehicle Connection Wiring Color Codes" for additional wire color-coding specifics.

Connect Vehicle 12-80VDC Connection

1. The VX6 must be turned off and the power cable must be UNPLUGGED from the VX6.
2. While observing the fuse requirements specified above, connect the power cable as close as possible to the actual battery terminals of the vehicle. When available, always connect to un-switched terminals in vehicle fuse panel, after providing proper fusing.

   ATTENTION: For uninterrupted power, electrical supply connections should not be made at any point after the ignition switch of the vehicle.
3. Route the power cable the shortest way possible. The cable is rated for a maximum temperature of 105°C (221°F). When routing this cable it should be protected from physical damage and from surfaces that might exceed this temperature.

   Do not expose the cable to chemicals or oil that may cause the wiring insulation to deteriorate.

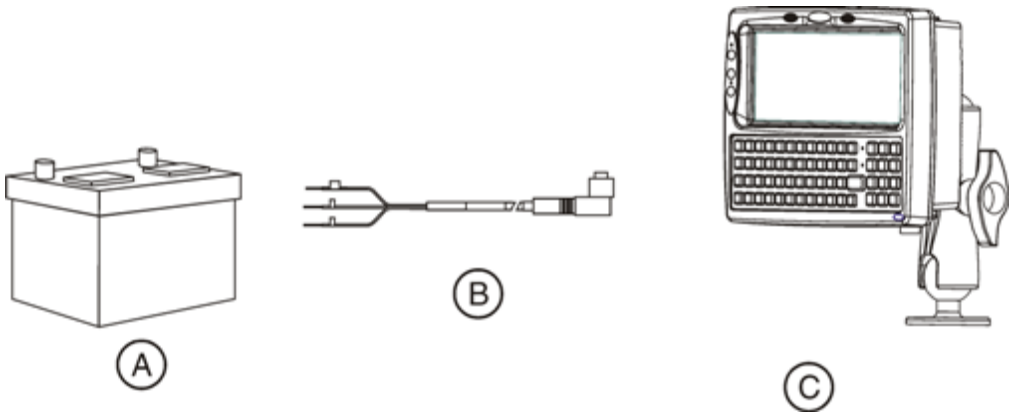
   Always route the cable so that it does not interfere with safe operation and maintenance of the vehicle.Use proper electrical and mechanical fastening means for terminating the cable. Properly sized “crimp” type electrical terminals are an accepted method of termination. Please select electrical connectors sized for use with 18AWG (1mm^2) conductors.

   Wiring color codes for Honeywell supplied DC input power cabling:

Vehicle Supply	**Wire Color**
+12 - 80VDC (DC +)	White
Return (DC -)	Black
Vehicle Chassis GND	Green

4. Provide mechanical support for the cable by securing it to the vehicle structure at approximately one foot intervals, taking care not to over tighten and pinch conductors or penetrate outer cable jacket.
5. Refer to the following sections to complete the power connection to the VX6.

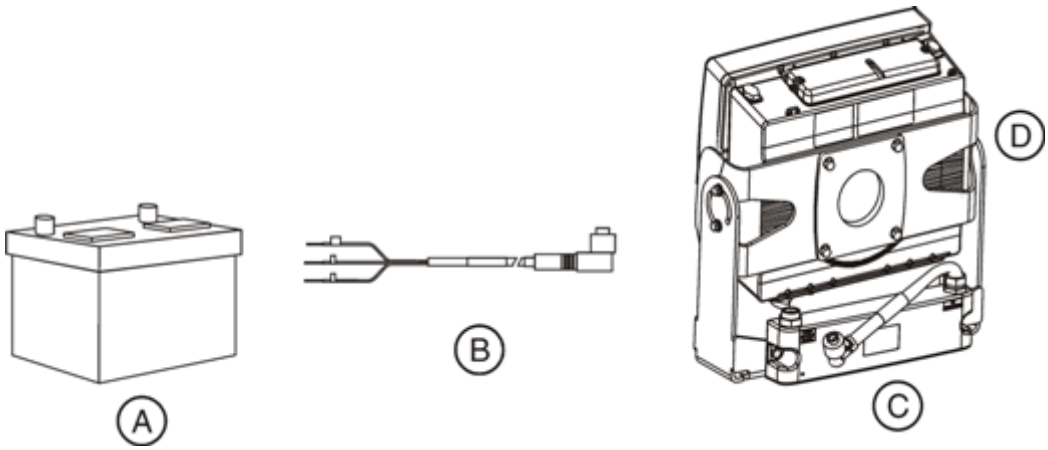
Connect VX6 without a UPS Battery Pack



A. Vehile Battery
B. Vehicle Power Connection Cable
C. VX6 Computer

1. Connect the power cable to the vehicle's electrical system as described in "Connect Vehicle 12-80VDC Connection".
2. Connect the power cable to the VX6 by aligning the water-tight connector pins to the power connector on the bottom of the VX6; push down on the water-tight connector and twist it to fasten securely.
3. Turn the VX6 on.

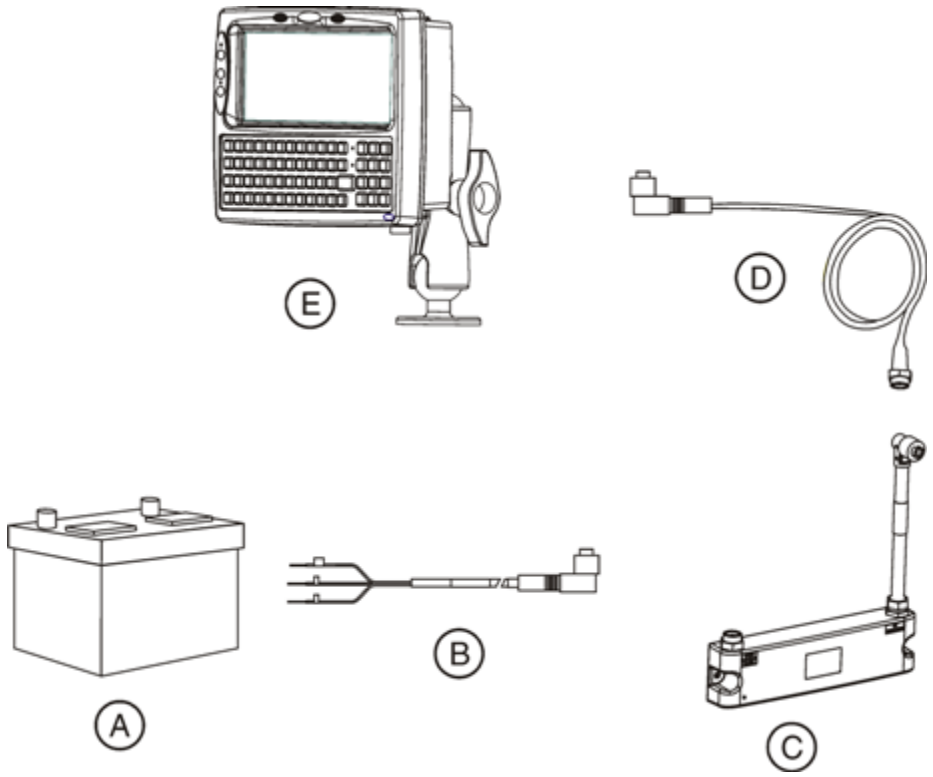
Connect VX6 to an Integrated Mount UPS Battery Pack



A. Vehicle Battery
B. Vehicle Power Connection Cable
C. UPS Battery Pack
D. VX6 Computer

1. Connect the power cable to the vehicle's electrical system as described in Connect Vehicle 12-80VDC Connection.
2. Connect the power cable to the UPS battery pack by aligning the water-tight connector pins to the input connector (labeled "From Vehicle"); push down on the water-tight connector and twist it to fasten securely.
3. Connect the output cable (labeled "To Computer") from the UPS battery pack to the power connector on the bottom of the VX6 by aligning the water-tight connector to the power connector; push down on the water-tight connector and twist it to fasten securely.
4. Turn the VX6 on.

Connect VX6 to a Remotely Mounted UPS Battery Pack



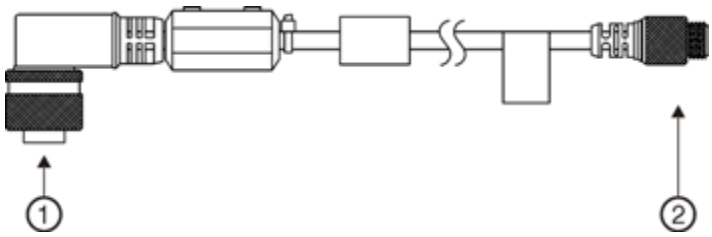
A. Vehicle Battery
B. Vehicle Power Connection Cable
C. UPS Battery Pack
D. Extension Cable
E. VX6 Computer

1. Connect the power cable to the vehicle's electrical system as described in Connect Vehicle 12-80VDC Connection.
2. Connect the power cable to the UPS battery pack by aligning the water-tight connector pins to the input connector (labeled "From Vehicle"); push down on the water-tight connector and twist it to fasten securely.
3. Connect the output cable (labeled "To Computer") from the UPS battery pack to the extension cable by aligning the water-tight connector to the input end of the extension cable; push down on the water-tight connector and twist it to fasten securely.
4. Route the extension cable the shortest way possible. The cable is rated for a maximum temperature of 105°C (221°F). When routing this cable it should be protected from physical damage and from surfaces that might exceed this temperature.

   Do not expose the cable to chemicals or oil that may cause the wiring insulation to deteriorate. Always route the cable so that it does not interfere with safe operation and maintenance of the vehicle.
5. Provide mechanical support for the cable by securing it to the vehicle structure at approximately one foot intervals, taking care not to over tighten and pinch conductors or penetrate outer cable jacket.
6. Connect the output end of the extension cable to the power connector on the bottom of the VX6 by aligning the water-tight connector to the power connector; push down on the water-tight connector and twist it to fasten securely.
7. Turn the VX6 on.

Power Adapter Cable

Honeywell offers an adapter cable (part no. 9000A077CBLPWRADPTR) to adapt certain Honeywell VX1, VX2 or VX4 DC power supplies to the VX6. Please read and follow all cautions below to determine if your present power supply can be used with the VX6.



1. VX6 Connector
2. VX1/2/4 Power Supply Connector

Caution	This document assumes the VX1/2/4 DC power cable, if applicable, is already properly connected to your vehicle. If this is not the case, please refer to the "VX1 User's Guide", "VX2 User's Guide" or "VX4 User's Guide" for direct vehicle connection details.
Caution	For use only with VX1/2/4 DC power cables with yellow colored cable containing 18AWG wires. Do not use this cable with VX1/2/4 DC power cables with gray colored cable containing 22AWG wires. These power cables must be replaced with a VX5/6/7 power cable.
Caution	When a DC power cable that is eight feet or longer is in a 12V application, there may be an excessive voltage drop over the longer cable. If this occurs, a new power cable is required.
Caution	Do not use this adapter with AC power supplies originally designed for the 1380, 1390, VX1, VX2 or VX4. These power supplies do not have sufficient power for the VX6.

Note: For more information on the 12-80VDC direct, UPS battery pack and extension cable connections please refer to the appropriate section earlier in this manual.

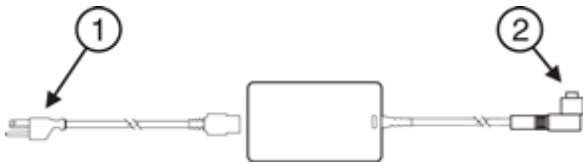
Connect Power Adapter Cable

1. The VX6 must be turned off and the power cable must be UNPLUGGED from the VX6.
2. Attach the smaller end of the Power Adapter Cable to the VX1/2/4 power cable by aligning the water-tight connector pins to the power cable connector. Push down on the water-tight connector and twist it to fasten securely.
3. Connect the larger end of the Power Cable directly to the VX6 or to a UPS battery pack, as desired. Please refer to the appropriate section (12-80VDC direct, UPS battery pack and extension cable connections) earlier in this manual for UPS battery pack connection details.

External Power Supply, Optional

If 12V to 80V DC power is not available – for example, in an office environment – an optional external Input Power Supply can be used to convert AC wall power to an appropriate DC level.

The Honeywell-approved AC Power Adapter is only intended for use in a 25ºC (77ºF) maximum ambient temperature environment.



1. AC Input Cable (US only)
2. DC Output Cable

In North America, this unit is intended for use with a UL Listed ITE power supply with output rated 12 – 80 VDC, minimum 75W. Outside North America, this unit is intended for use with an IEC certified ITE power supply with output rated 12 – 80 VDC, minimum 75W.

The external power supply may be connected to either a 120V, 60Hz supply or, outside North America, to a 230V, 50Hz supply, using the appropriate detachable cordset. In all cases, connect to a properly grounded source of supply provided with maximum 15 Amp overcurrent protection (10 Amp for 230V circuits).

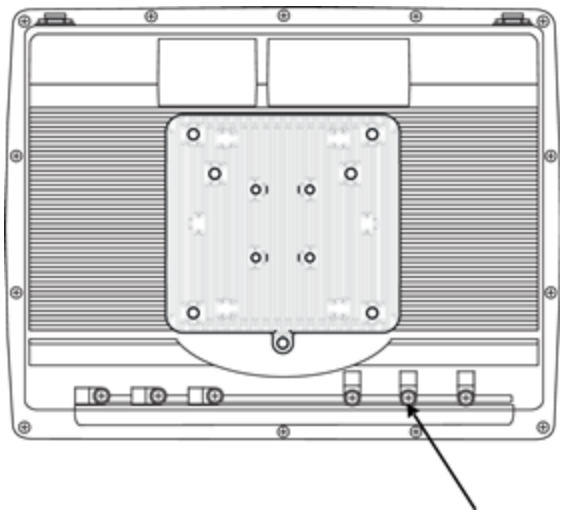
Connect External Power Supply

1. Turn the VX6 off.
2. Connect the detachable cordset provided by Honeywell (US only, all others must provide their own cable) to the external power supply (IEC 320 connector).
3. Plug the cordset into appropriate, grounded, electrical supply receptacle (AC mains).
4. Connect the watertight connector end to the VX6 Power Connector by aligning the connector pins to the power connector; push down on the watertight connector and twist it to fasten securely.
5. Turn the VX6 on.

Strain Relief Cable Clamps

Equipment Required: Phillips screwdriver (not supplied by Honeywell)

There are strain relief cable clamps secured to the back of the VX6. Use the strain relief clamps to secure audio, power, and I/O cables attached to the VX6.



1. Remove the strain relief clamp from the back of the VX6 by turning the screw counterclockwise. Put the screw aside in a safe location.
2. Slide the strain relief clamp over the cable.
3. Using a Phillips screwdriver and the screw that was removed, refasten the clamp holding the cable to the VX6. Do not stretch the cable. Leave enough slack in the cable to allow it to be connected and disconnected easily when needed.
4. Continue in this manner until all cables are secured to the VX6.

Uninterruptible Power Supply Battery Pack

An optional Uninterruptible Power Supply (UPS) battery pack is designed to provide power to the VX6 for short periods of time when vehicle power is unavailable (such as when vehicle batteries are swapped).

Fully charged, the UPS battery pack powers the VX6 for a minimum of 15 minutes at 25º C (77º F) ambient temperature.

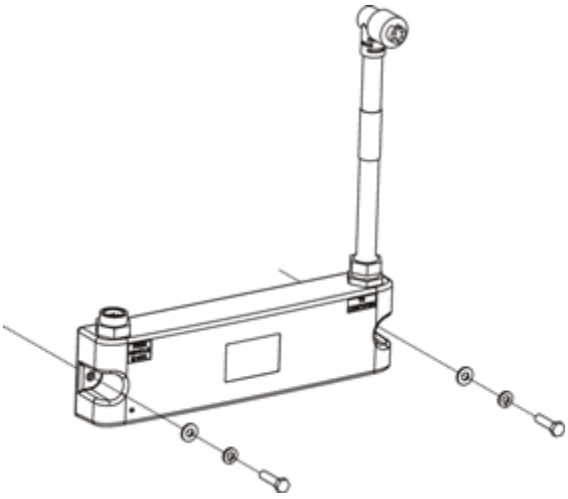
The Power Status LED on the VX6 indicates the UPS battery pack status:

Green	Running on 12V – 80V power input
Solid Yellow	Running on UPS battery pack power, battery is not low on power
Flashing Yellow	Running on UPS battery pack power, battery is critically low

UPS Battery Pack Remote Mounting

The optional UPS battery pack must be mounted remotely when using the RAM mount system or a U-bracket designed for a previous model Honeywell computer. The remote mount can also be used with the VX6 U-bracket assembly if it is not convenient to mount the UPS battery pack to the U-bracket.

A six foot extension cable is available to connect the UPS battery pack to the VX6.

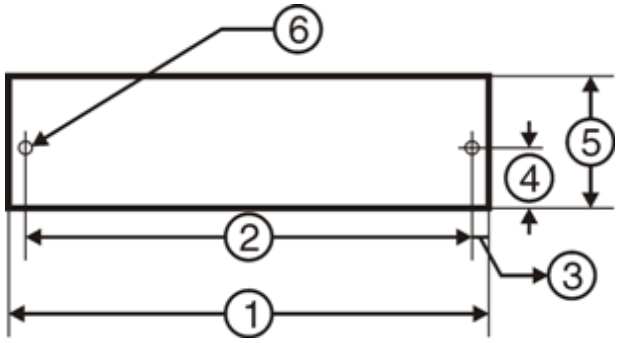


1. Position the UPS battery pack to allow cables to reach the vehicle battery and the VX6.
2. Attach the UPS battery pack to the vehicle mounting surface using two 1/4 bolts, lock washers and flat washers (or equivalent) fasteners.

Note: 1/4 bolts and washers not included.

IMPORTANT:Mount to the most rigid surface available.

UPS Battery Pack Remote Mounting Dimensions

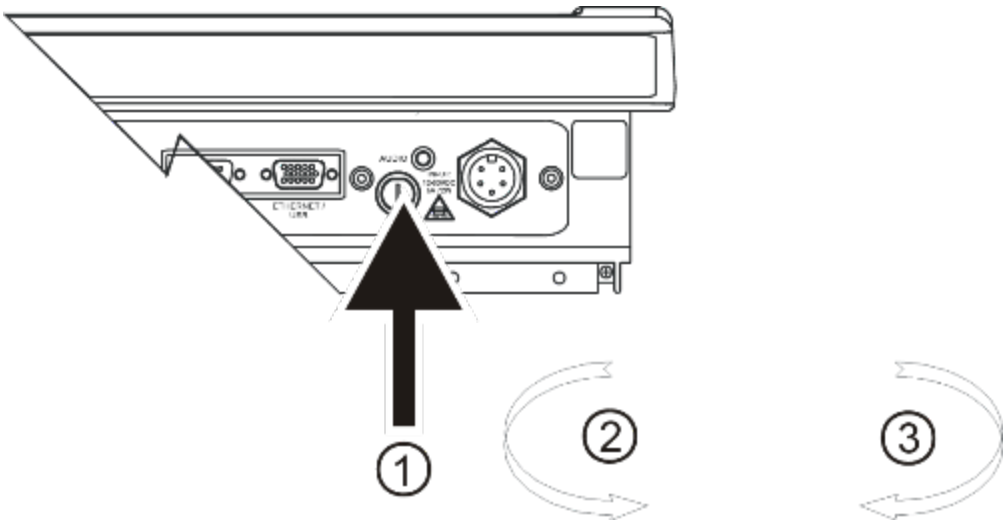


1. 11.00” / 279.40 mm
2. 10.23” / 259.80 mm
3. 0.38” / 9.65 mm
4. 1.39” / 35.31 mm
5. 3.04” / 77.22 mm
6. 0.30” / 7.62 mm

Fuse Replacement for the VX6

The VX6 uses a 100V, 10A time delay (slow blow), high current interrupting rating fuse that is externally accessible and user replaceable.

Should it need replacement, replace with same size, rating and type of fuse – Littlefuse 0234010 or Optifuse MSC-10A (5x20mm).



1. Fuse
2. Twist in this direction to remove
3. Twist in this direction to insert

Caution	
⚠	Fuse has voltage on it even when power is off. Always disconnect input power before changing fuse.

1. Turn the VX6 off and disconnect the power cable from the VX6.
2. While holding the VX6 over a level surface, push the fuse cover in and twist it one quarter turn counterclockwise. A flat head screwdriver may be used to twist the fuse cover.
3. Remove the fuse.
4. Discard the fuse and place a new fuse in the holder.
5. Push the fuse in and twist it clockwise one quarter turn.
6. Reconnect the power cable to the VX6.

Connect Antenna

Several antenna options are available for the VX6. Options include:

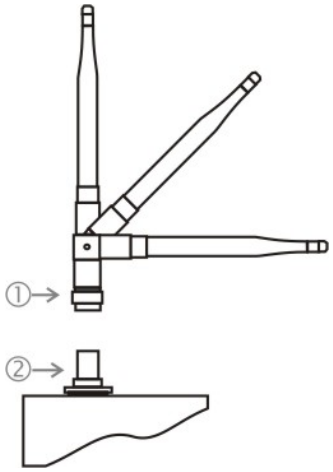
- single external antenna
- dual external antennas
- single or dual remote vehicle mount antennas
- internal antenna (installed when manufactured)

Note: VX6's are equipped with a radio and require an antenna. Some VX6's may be equipped with a dual antenna option. For these VX6's, an external antenna must be connected to each antenna connector.

Connect External Antenna

If the internal antenna option was selected, there are no external antenna connectors on the VX6.

The external antenna connectors are located on the top of the VX6.



1. Antenna
2. Antenna Connector

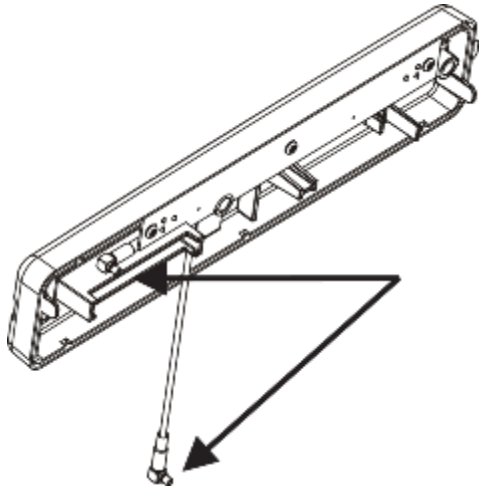
Place the antenna over the antenna connector. Push the antenna down and twist it clockwise until the antenna is secured. Repeat for second antenna connector, if present.

Adjust the antenna angle to improve RF communications with the computer network.

Note: Substitution of antennas is not permitted unless authorized by Honeywell. Use of unauthorized antennas will void the FCC emissions certification of the VX6.

Internal Antenna

If the internal antenna option is ordered, an antenna is mounted on the inside of the user access panel cover (located on top of the VX6).



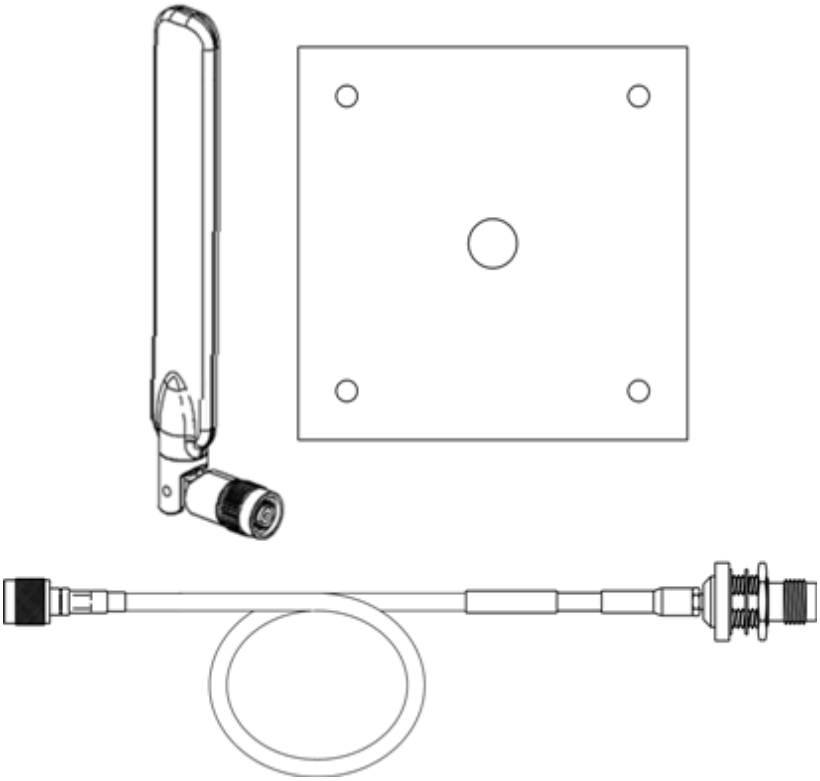
The internal antenna assembly has two antenna cables.

Attach the antenna cables to the radio card.

When this process is complete, reattach the access cover screws using a torque wrench capable of measuring to 9±1 inch pounds force (1.016±.11 N m).

The screws must be fastened to 9 inch pounds each. The screws require a Phillips size 1 driver head.

Remote Antenna Installation Kit

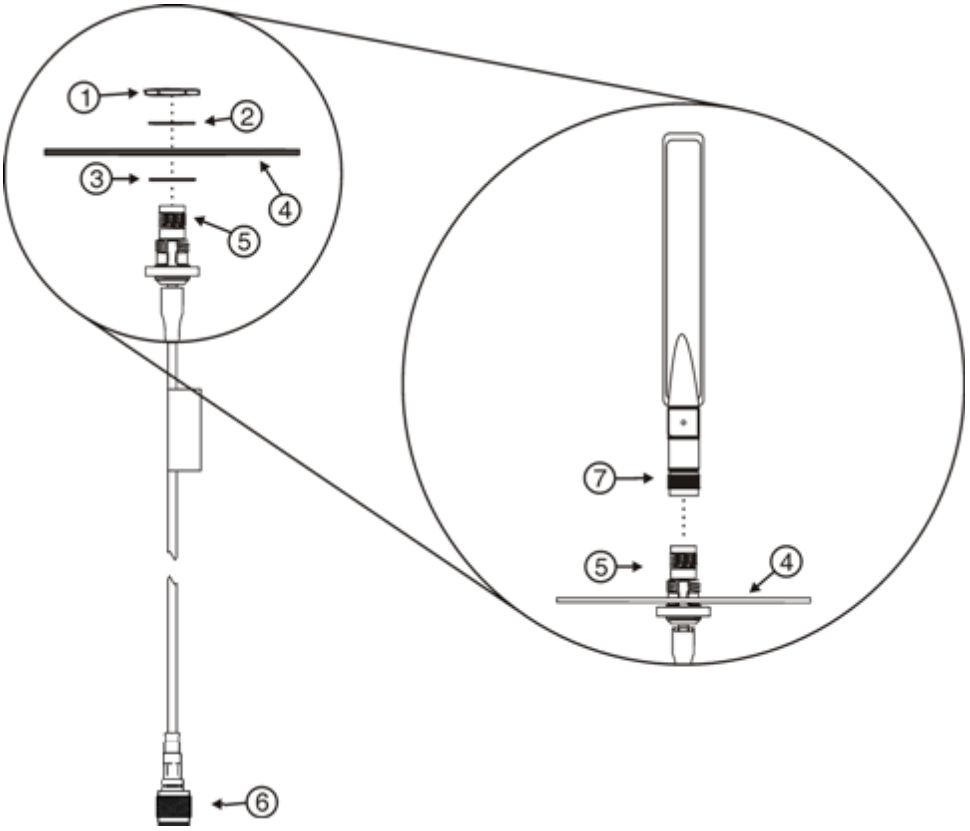


- The Remote Antenna Installation Kit consists of the base plate and cable.
- Depending on the antenna kit selected, the connector to the VX6 is either straight or a 90° angle.
- Antenna is sold separately. Cable length varies by kit.
- Tools are not included.

The remote antenna base is mounted on the top of a forklift, truck or other vehicle and cabled to the VX6 inside the vehicle. The cable is available in different lengths and with a straight or right angle adapter on the end.

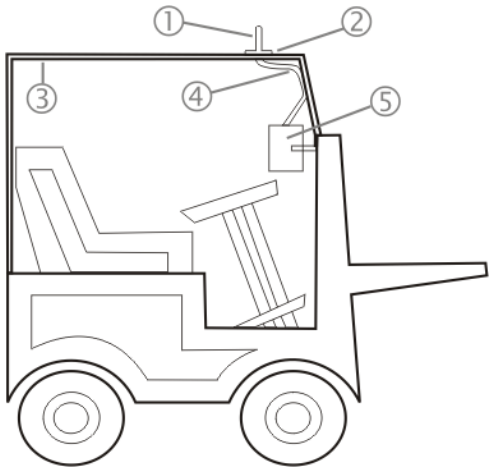
The Vehicle Remote Mount Antenna cannot be used by devices with an internal antenna.

Components and Mounting Diagram



1. Nut
2. Washer
3. Washer
4. Mounting Plate
5. To Antenna
6. To VX6 Antenna Connector
7. Antenna

Typical Installation



1. Antenna
2. Mounting Plate
3. Vehicle Safety Cage
4. Coaxial Cable
5. Vehicle Mounted VX6

Remote Antenna Mounting Instruction

1. Attach and secure the mounting plate to the highest point on the safety cage, following these precautions:
    - The plate must be mounted so the antenna is not damaged while the vehicle or any of its parts are moving.
    - The mounting plate must be parallel to the floor.
    - If the VX6 requires two antennas, they must be mounted at least 12 inches (304.8mm) apart.
2. Attach the female connector of the coaxial cable to the antenna connector on the vehicle mounted VX6.
3. Insert the male connector on the coaxial cable though the hole in the mounting plate.
4. Secure the connector to the mounting plate with the washer and hex nut.
5. Use cable ties to secure the coaxial cable to the vehicle as necessary. Make sure the cable is routed so it is not damaged by any moving parts of the vehicle.
6. Attach the antenna to the male connector on the end of the coaxial cable. The antenna must be mounted in a vertical position.
7. If the VX6 is using dual antennas (diversity option), repeat these steps for the second antenna.

Chapter 5: Technical Assistance

If you need assistance installing or troubleshooting your device, please contact us by using one of the methods below:

Knowledge Base: www.hsmknowledgebase.com

Our Knowledge Base provides thousands of immediate solutions. If the Knowledge Base cannot help, our Technical Support Portal (see below) provides an easy way to report your problem or ask your question.

Technical Support Portal: www.hsmsupportportal.com

The Technical Support Portal not only allows you to report your problem, but it also provides immediate solutions to your technical issues by searching our Knowledge Base. With the Portal, you can submit and track your questions online and send and receive attachments.

Web form: www.hsmcontactsupport.com

You can contact our technical support team directly by filling out our online support form. Enter your contact details and the description of the question/problem.

Telephone: www.honeywellaidc.com/locations

For our latest contact information, please check our website at the link above.

Product Service and Repair

Honeywell International Inc. provides service for all of its products through service centers throughout the world. To obtain warranty or non-warranty service, please visit www.honeywellaidc.com and select **Support > Contact Service and Repair** to see your region's instructions on how to obtain a Return Material Authorization number (RMA #). You should do this prior to returning the product.

Limited Warranty

Honeywell International Inc. ("HII") warrants its products to be free from defects in materials and workmanship and to conform to HII's published specifications applicable to the products purchased at the time of shipment. This warranty does not cover any HII product which is (i) improperly installed or used; (ii) damaged by accident or negligence, including failure to follow the proper maintenance, service, and cleaning schedule; or (iii) damaged as a result of (A) modification or alteration by the purchaser or other party, (B) excessive voltage or current supplied to or drawn from the interface connections, (C) static electricity or electro-static discharge, (D) operation under conditions beyond the specified operating parameters, or (E) repair or service of the product by anyone other than HII or its authorized representatives.

This warranty shall extend from the time of shipment for the duration published by HII for the product at the time of purchase ("Warranty Period"). Any defective product must be returned (at purchaser's expense) during the Warranty Period to HII factory or authorized service center for inspection. No product will be accepted by HII without a Return Materials Authorization, which may be obtained by contacting HII. In the event that the product is returned to HII or its authorized service center within the Warranty Period and HII determines to its satisfaction that the product is defective due to defects in materials or workmanship, HII, at its sole option, will either repair or replace the product without charge, except for return shipping to HII.

EXCEPT AS MAY BE OTHERWISE PROVIDED BY APPLICABLE LAW, THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER COVENANTS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, ORAL OR WRITTEN, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT.

HII'S RESPONSIBILITY AND PURCHASER'S EXCLUSIVE REMEDY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT WITH NEW OR REFURBISHED PARTS. IN NO EVENT

SHALL HII BE LIABLE FOR INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, AND, IN NO EVENT, SHALL ANY LIABILITY OF HII ARISING IN CONNECTION WITH ANY PRODUCT SOLD HEREUNDER (WHETHER SUCH LIABILITY ARISES FROM A CLAIM BASED ON CONTRACT, WARRANTY, TORT, OR OTHERWISE) EXCEED THE ACTUAL AMOUNT PAID TO HII FOR THE PRODUCT. THESE LIMITATIONS ON LIABILITY SHALL REMAIN IN FULL FORCE AND EFFECT EVEN WHEN HII MAY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH INJURIES, LOSSES, OR DAMAGES. SOME STATES, PROVINCES, OR COUNTRIES DO NOT ALLOW THE EXCLUSION OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

All provisions of this Limited Warranty are separate and severable, which means that if any provision is held invalid and unenforceable, such determination shall not affect the validity of enforceability of the other provisions hereof. Use of any peripherals not provided by the manufacturer may result in damage not covered by this warranty. This includes but is not limited to: cables, power supplies, cradles, and docking stations. HII extends these warranties only to the first end-users of the products. These warranties are non-transferable.

The duration of the limited warranty for the VX6 is 1 year.

The duration of the limited warranty for the VX6 Vehicle Mount Assembly is 1 year.

The duration of the limited warranty for the VX6 external UPS battery is 1 year.

The duration of the limited warranty for the VX6 AC power supply and cables is 1 year.

The duration of the limited warranty for the VX6 DC-DC Converter is 1 year.

The duration of the limited warranty for the VX6 cables (USB, Serial, Communication, Power) is 1 year.

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